AVANTIS POWER SPORTS
www.avantispowersports.com

# *Gasoline Scooter*

## *Owner's/Operator's Manual*

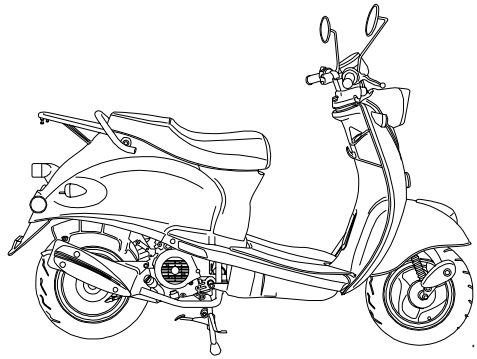


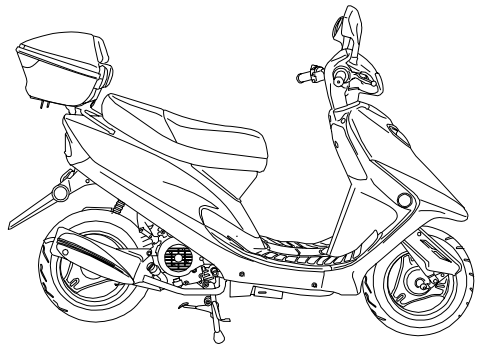


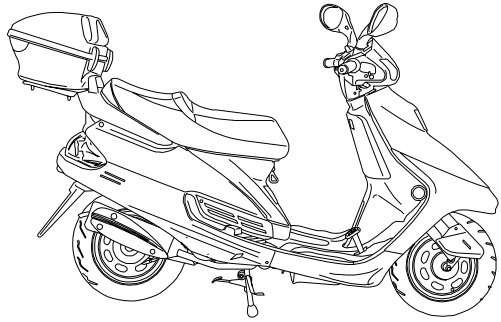


Parts: www.cart.avantispowersports.com

# Owner's Manual







# 49cc Scooter

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***WARNING! READ AND UNDERSTAND ALL SAFETY PRECAUTIONS IN THIS MANUAL BEFORE OPERATING. FAILURE TO COMPLY WITH INSTRUCTIONS IN THIS MANUAL COULD RESULT IN PERSONAL INJURY, PROPERTY DAMAGE, AND/ OR VOIDING OF YOUR WARRANTY.***

***WARNING! IT IS YOUR RESPONSIBILITY TO KNOW AND OBEY ALL APPLICABLE LOCAL, STATE, AND FEDERAL LAWS AT ALL TIMES WHILE OPERATING THIS VEHICLE INCLUDING BUT NOT LIMITED TO TRAFFIC SAFETY, VEHICLE REGISTRATION, EMISSIONS, AND NOISE.***

# Owner's Manual

## Safety Guidelines - Definitions

This manual contains important information that you need to know and understand in order to protect YOUR SAFETY and to PREVENT EQUIPMENT PROBLEMS. The following symbols help you recognize this information. Please read the manual and pay attention to these sections.

***WARNING! WARNINGS INDICATE A CERTAINTY OR STRONG POSSIBILITY OF PERSONAL INJURY OR DEATH IF INSTRUCTIONS ARE NOT FOLLOWED.***

*CAUTION: CAUTIONS INDICATE A POSSIBILITY OF EQUIPMENT DAMAGE IF INSTRUCTIONS ARE NOT FOLLOWED.*

*Note: Notes give helpful information.*

***WARNING! IMPROPER OPERATION OR MAINTENANCE OF THIS VEHICLE COULD RESULT IN SERIOUS INJURY AND PROPERTY DAMAGE. READ AND UNDERSTAND ALL WARNINGS AND OPERATING INSTRUCTIONS BEFORE USING THIS EQUIPMENT. ALWAYS OBEY ALL APPLICABLE LOCAL, STATE, AND FEDERAL LAWS WHEN OPERATING THIS VEHICLE.***

## Save These Important Safety Instructions!

Read and understand all of these safety instructions. Be sure to retain them for future use.

# 49cc Scooter

## General Precautions

***WARNING! FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SEVERE INJURY OR DEATH.***

*CAUTION: FAILURE TO FOLLOW THESE INSTRUCTIONS CAN ALSO RESULT IN DAMAGE TO THE VEHICLE AND/OR OTHER PROPERTY.*

- **Read and follow all instructions in this Owner's/Operator's manual, any accompanying supplements, and the Engine Owner's Manual before attempting to operate this vehicle.** Do not discard this Owner's Manual, safety video, or any other material or documentation included with this vehicle.
- **Make sure to view the enclosed safety video.**
- **Exhaust fumes are toxic.** California Proposition 65 warning: Gasoline engine exhaust from this vehicle contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. The engine exhaust contains carbon monoxide, which is a tasteless, odorless, poisonous gas. Never operate this vehicle indoors or in an enclosed area without adequate ventilation.
- **This vehicle may have been supplied to you completely assembled.** To prevent possible injury or death, read and follow the assembly instructions to make sure the vehicle was assembled properly.
- **Always perform the daily pre-ride inspection specified in this manual before operating this vehicle.**
- **Modifying the vehicle and/or removing original equipment and/or safety decals could make this vehicle unsafe for operation.**
- **Replace any safety decals that become unreadable or detached from the vehicle.** Decals provide critical warnings about potential hazards or safety requirements.
- **Never use this vehicle for stunt riding, spinouts, donuts, racing, or any form of competition.**

# Additional Warnings

## Protective Clothing/Equipment

- **Most accident fatalities are due to preventable head injuries.** Always wear a properly fitting motorcycle type helmet approved by agencies such as the Department of Transportation (DOT), Safety Helmet Council of America (SHCA), or Snell Memorial Foundation (SNELL).
- **Always wear face shields or goggles, boots, gloves and other appropriate protective clothing.**
- **Long hair, loose clothes, or jewelry can get caught in moving parts below and behind the seat or your surrounding environment.** Remove or tie back anything loose that can reach below and behind the seat before riding.

## Moving Parts

- **Never place hands, feet, any body parts or clothing near the engine,** wheels, chain, and other rotating parts of the vehicle while riding or running the engine.
- **Use extreme caution when performing required maintenance while the engine is running.**
- **Keep guards and pads in place at all times.** Prevent accidental contact by any person whenever the vehicle is running.
- **The guards over the brake, clutch, torque converter, axle, and drive sprockets also help prevent mud and debris from contacting those components.**

## Traffic Safety

- **ALWAYS FOLLOW THE ENTIRE PRE-RIDE CHECKLIST PRIOR TO STARTING OR RIDING THE SCOOTER.**
- **Your safety while riding this vehicle depends entirely on your ability to exercise proper judgment.** You must be of sufficient age, understanding, mental capacity, and physical capability to safely operate this vehicle.
- **Always obtain mature, supervised instruction and sufficient practice in an uncongested area before operating this vehicle on any public thoroughfare.**

# 49cc Scooter

## Additional Warnings (cont'd)

### Traffic Safety (cont'd)

- **Never use this vehicle to transport a passenger, materials or equipment, or animals.**
- **Excessive vehicle speed is a leading cause of accidents, which can cause death or serious harm to you, other people, and/or property.** Always obey all applicable traffic safety laws while operating this vehicle, being sure to account for current weather and traffic conditions and slow down if necessary. **Drive to arrive!**
- **Use extreme caution when riding on wet, slippery, rough, or sloped terrain.** There is an increased risk of loss of control, which can result in injury, death, and/or property damage.
- **Always slow down when turning.** High-speed turning can cause loss of control and/or possible death, injury, and/or property damage. Turning on a slope increases the risk of rollover. Practice turning in a safe area away from traffic until you are confident in your ability to control the vehicle at all times.
- **Operating this vehicle at an unsafe speed, especially while turning, can cause death, injury, and/or property damage.**
- **Never use this vehicle to perform any type of racing, stunt riding, jumps, spin-outs, donuts, or other maneuvers.** You could kill or injure yourself or others and/or cause property damage.
- **Never operate vehicle while under the influence of alcohol, drugs or medication of any kind.** Such operation is dangerous to yourself and/or others and may be illegal in your area.
- **Check tire pressure before operating the vehicle using a properly calibrated tire air pressure gauge.**
- **Stop the vehicle and shut off the engine immediately if the vehicle makes unusual noises or vibrations.** Check the vehicle for damage. Excessive noise or vibration is a sign of loose or worn parts.
- **Do not use this vehicle on rental tracks of any kind.**

# Owner's Manual

# Additional Warnings (cont'd)

## Engine/Motor Safety

- **Keep the engine/motor free of dirt and debris, especially in the throttle linkage area.**
- **Never start the engine/motor without checking to see that the throttle control is in the idle position and that the parking brake is set.**
- **Never start the engine/motor unless you are properly seated with your hands firmly on the controls.**
- **Never tamper with, alter, or change the vehicle's engine/motor settings. The engine/motor governor is factory set and protects the engine/motor from damage.** Excessive engine/motor speed is potentially dangerous to the operator, bystanders, and the engine/motor itself.
- **All guards must be in place prior to starting the engine.**
- **Operating the vehicle in conditions where water, mud, snow, dirt, sand or other debris can get into the throttle cable conduit and/or the throttle mechanism can cause the cable or throttle mechanism to bind, which may lead to throttle sticking, loss of control, and possible death, injury, and/or property damage.**

## Fasteners

- Make sure that all screws, nuts, and bolts are properly tightened. Never over-tighten hardware that is designed to move, such as front wheels, spindles, A-arm pivots, etc. Restricting moving parts can cause a loss of control and possible injury or death.
- Always replace torque-type locknuts with new locknuts of the same type after removing the old locknuts.

# 49cc Scooter

## Additional Warnings (cont'd)

### Fueling

- Check the fuel supply before each use. Never fill the fuel tank while the engine is running or hot. Always allow at least 1" of expansion space at the top of the fuel tank. There should not be any fuel in the filler neck. Replace the fuel cap tightly after refueling to prevent a fuel spillage, fire, or explosion hazard.
- Always use an original gas cap or approved OEM replacement. Never fill fuel tank while the vehicle is inside a building. Gasoline vapors can cause injury or death and can pose a fire or explosion risk.
- Move the vehicle at least 10 feet before starting the engine.
- Use extreme caution when starting the engine. Hot engine, muffler, or drive components can cause serious burns on contact.

### Maintenance

- **Do not modify the vehicle from the manufacturer's original design and configuration.**
- **Never wash or operate the vehicle in freezing temperatures.** Water can freeze in the throttle cable conduit and/or on the throttle mechanism, possibly resulting in throttle sticking, which can cause the engine to continue to run and result in loss of control.
- **Assembly, maintenance, and/or repair of this vehicle should only be performed by designated dealers or authorized small-engine repair centers for engine repairs to ensure quality work and safe vehicle conditions.**
- **Always disconnect the spark plug wire (gasoline vehicles) or shut off the batteries (electric vehicles) before commencing any work in the engine vicinity or where there is a possibility that the vehicle could move unexpectedly.** Keep the spark plug cable away from the spark plug to avoid accidental starting.
- **Avoid contacting the muffler, cylinder head, or any potentially hot area on or around the engine when working on, around, or restarting the engine.**

# Owner's Manual

# Additional Warnings (cont'd)

## Maintenance (cont'd)

- **Store this vehicle in a place where gasoline fumes cannot reach an open flame, spark, or other source of ignition.** Drain the fuel tank in a cool well-ventilated area prior to any long-term storage. Never store this vehicle in close proximity to appliances such as hot water heaters or furnaces.
- **If your scooter is equipped with an electric motor, be sure to shut off the battery prior to performing any maintenance to avoid the risk of electric shock.**
- **Engines, exhausts, and other components can become extremely hot during operation.** Use caution when near hot components.
- **Never adjust, repair, or clean the vehicle while it is in motion.**

## NHTSA Safety Notice

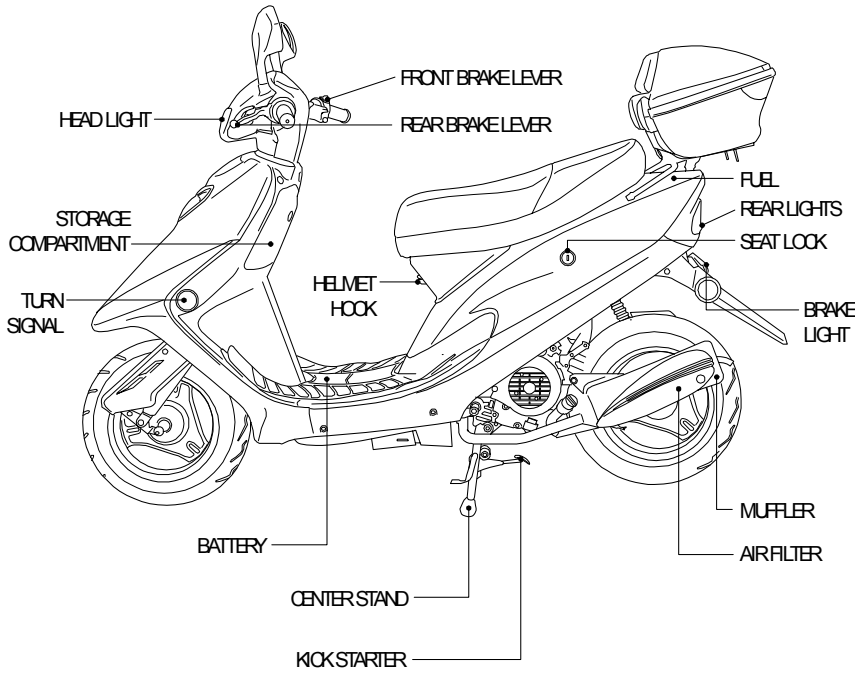
If you believe that your vehicle has a defect that could cause a crash or could cause injury or death, you should immediately notify the National Highway Traffic Safety Administration (NHTSA) and Geely USA. If NHTSA receives similar complaints, it may open an investigation. If it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer or Geely USA.

You may also call the Auto Safety Hotline. The Hotline can also provide other motor vehicle safety information.

# 49cc Scooter

## Pre-Ride Checklist

***WARNING! ALWAYS PERFORM THE ENTIRE PRE-RIDE CHECKLIST BEFORE USING THE VBEHICLE AS THIS CAN HELP YOU SPOT PROBLEMS THAT COULD INTERFERE WITH SAFE VEHICLE OPERATION. FAILURE TO FOLLOW THIS ENTIRE CHECKLIST BEFORE EVERY RIDE CAN CAUSE DEATH, SERIOUS INJURY, AND/OR PROPERTY DAMAGE TO YOURSELF AND/OR OTHERS.***



# Pre-Ride Checklist (cont'd)

## Before Starting the Engine/Motor

**1 Engine oil level**

- **a** Check for leaks.
- **b** Tighten filler cap securely.
- **c** Add oil if required.

**2 Fuel level**

- **a** Add fuel as necessary.
- **b** Do not overfill (no fuel in the filler neck).
- **c** Do not mix oil with gas.
- **d** Replace cap tightly.
- **e** Do not refuel a hot engine. Allow engine to cool before adding fuel.

**3 Warning decals**

- **a** Make sure all warning decals are legible and securely attached.
- **b** Replace as necessary.

**4 Tires**

- **a** Ensure that both tires have at least 1/8" inch tread depth at center.
- **b** Both tires must be inflated to the pressure indicated on the tire sidewalls.
- **c** Replace the tires if tread height is less than 1/8" at the center of tires.

**5 Drive Chain**

- **a** Check condition and tension.
- **b** Lubricate and adjust tension as necessary.

# 49cc Scooter

## Pre-Ride Checklist (cont'd)

### Before Starting the Engine/Motor (cont'd)

**6 Throttle**

- **a** Check for smooth operation. Make sure throttle "snaps" back to idle.
- **b** Check for frayed cable or damaged cable housing. Replace damaged cable.
- **c** Check for mud, debris and ice in the throttle cable/mechanism. Clean out any contamination.

**7 Fasteners**

- **a** Check that all axle nuts and lug nuts are secure.
- **b** Check for missing fasteners. Replace as necessary.
- **c** Check that all other fasteners are secure. Tighten as necessary.

**8 Steering**

- **a** Make sure steering turns freely.
- **b** Check for proper "toe-in" of wheels
- **c** Lubricate/adjust as necessary. See the Maintenance section.

**9 Frame/chassis**

Check for bent/damaged frame/chassis components. Replace as necessary.

**10 Battery (if equipped)**

Check that clamp bar and connections are tight and corrosion-free. Clean/tighten as necessary.

**11 Lights (if equipped)**

Check for proper operation. Replace bulbs as necessary.

**12 Torque converter**

Check that belt is loose and moves freely on the drive pulleys.

# Owner's Manual

# Pre-Ride Checklist (cont'd)

## Before Starting the Engine/Motor (cont'd)

**13 Guards**

- **a** Check all guards converting all rotating parts, including the clutch.
- **b** Tighten loose guards. Replace worn or damaged guards as necessary.

## After Starting the Engine/Motor

**1 Stop switch**

Perform stop switch test. Repair/replace as necessary.

**2 Throttle**

Check idle speed. Adjust as necessary.

**3 Brakes**

Perform brake test. Adjust as necessary.

## After Completing the Inspection

Correct any discrepancies according to this Operator's Manual before riding. If you cannot correct the problem, contact an authorized dealer for assistance or call (626) 336-1128 for Customer Service.

***WARNING! NEVER OPERATE THE VEHICLE WITH ANY KNOWN DISCREPANCIES. WORN/DAMAGED/MISSING COMPONENTS COULD LEAD TO DEATH, SERIOUS INJURY, AND/OR PROPERTY DAMAGE TO YOURSELF AND/OR OTHERS.***

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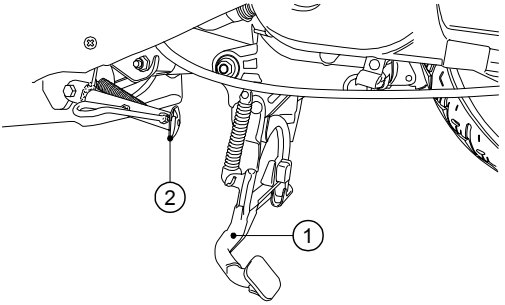
# 49cc Scooter

# Operation

## Starting the Engine (Gas)




***WARNING! ALWAYS RETRACT THE SIDE STAND PRIOR TO STARTING THE VEHICLE.***

**If the engine is cold:**

Balance the scooter on its center stand (1) with the side stand (2) fully retracted. Make sure the ignition key is OFF, then rotate the throttle 5-8 times to prime the engine. Squeeze the rear brake lever, turn the key to RUN, and push the START button. Your scooter includes an automatic choke.

*CAUTION: DO NOT RUN THE STARTER FOR MORE THAN 5 SECONDS AT A TIME. ALWAYS ALLOW AT LEAST 10 SECONDS BETWEEN STARTING ATTEMPTS.*

**If the engine is warm:**

Balance the scooter on its center stand (1) with the side stand (2) fully retracted. Squeeze the rear brake lever, turn the key to RUN, and push the START button. If the engine does not start after 5 seconds, wait 10 seconds, then turn the throttle 1/3 turn while pressing the START button. This will override the automatic choke and help start the engine.

*CAUTION: DO NOT RUN THE STARTER FOR MORE THAN 5 SECONDS AT A TIME. ALWAYS ALLOW AT LEAST 10 SECONDS BETWEEN STARTING ATTEMPTS.*

# Owner's Manual

# Operation (cont'd)

## Starting the Motor (Electric)

***WARNING! ALWAYS RETRACT THE SIDE STAND PRIOR TO STARTING THE VEHICLE.***

To start an electric scooter, balance it on its center stand (1) with the side stand fully retracted. Squeeze the rear brake lever and flip the motor stop switch to RUN. Twisting the throttle will engage the motor.

## Driving Safely

***WARNING! FOLLOW ALL OF THE WARNINGS IN THIS OPERATOR'S MANUAL AT ALL TIMES WHILE OPERATING THE SCOOTER. IT IS YOUR RESPONSIBILITY TO KNOW AND OBEY ALL APPLICABLE LOCAL, STATE, AND FEDERAL LAWS.***

***WARNING! NEVER OVERLOAD THE VEHICLE. THE CARRYING CAPACITY IS 200 POUNDS.***

After starting the engine, squeeze the rear (left) brake lever and the rear hand hold, then gently push the scooter forward off the center stand.

Straddle the seat while keeping one foot on the ground for stability. Slowly turn the throttle to begin driving. Place your foot on the floorboard as the scooter begins moving.

Never attach any articles to the handlebar. Stow any cargo on the luggage rack or in the under-seat storage box. Do not carry cargo weighing more than 10 pounds on the luggage rack. Always hold the rear hand hold when lifting the scooter.

***WARNING! ALWAYS WEAR A DOT-APPROVED HELMET, EYE PROTECTION, AND SHOES WHEN RIDING YOUR VEHICLE.***

***WARNING! NEVER DRIVE THE SCOOTER WITH THE SIDE STAND EXTENDED.***

# 49cc Scooter

## Operation (cont'd)

### Shutting off the engine/motor

Always shut off the engine/motor by turning the ignition switch to OFF.

*Note: The emergency stop switch will shut off the engine, however leaving the ignition switch in the RUN position could drain the battery.*

### Stopping the vehicle

***WARNING! WET, OILY, OR SANDY ROADS REDUCE BRAKING EFFECTIVENESS. HARD BRAKING ON THESE SURFACES COULD LEAD TO LOSS OF CONTROL AND A SERIOUS ACCIDENT. ALWAYS REDUCE SPEED AS GRADUALLY AS POSSIBLE.***

When braking, always engage the rear brake first to retain maximum control of the scooter. Most of your stopping power comes from the front wheel.

### Parking

Always leave the key in the lock position when parking the vehicle to help prevent theft. Park on smooth hard surfaces, being sure to use the center stand whenever possible.

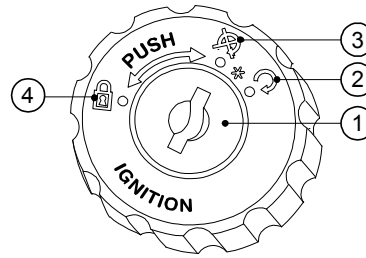
### Breaking in

- Following this break-in procedure ensures that your scooter is functioning properly and maximizes engine life.
- Never drive this vehicle over 25 mph during the first 250 miles of operation. Excessive speed could result in engine failure.
- Always use fresh 89 octane gasoline. Avoid gasoline that contains alcohol, which can damage rubber gaskets and engine seals.
- Check and adjust the brakes, throttle cable, tire pressure, and fasteners weekly before riding. This is in addition to the pre-ride checklist.
- Schedule regular maintenance with your Nikota dealer.
- Never add oil to the gasoline; your scooter uses a 4-stroke engine with an internal lubricating system.

# Owner's Manual

# Operation (cont'd)

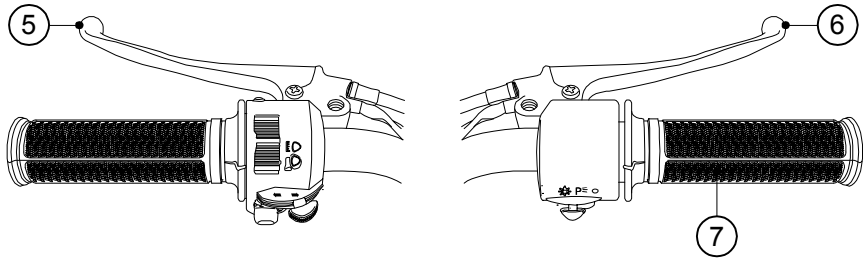
## Ignition Switch




The main ignition switch contains three positions:

- **ON (2):** The engine can start; the key (1) cannot be removed.
- **OFF (3):** This position shuts off the engine and allows you to remove the key.
- **LOCK (4):** From the OFF position, push inward and turn the key counterclockwise to the LOCK position while turning the steering column to the left and shaking it lightly to engage the steering lock. Remove key.

## Brake Levers & Throttle




- **Rear brake (5):** When stopping the scooter, squeeze the rear brake smoothly and firmly. Always engage the rear brake first.
- **Front brake (6):** Squeeze the lever gently at first to avoid locking the front wheel. Most of your stopping power comes from the front wheel, which should always be used to supplement the rear wheel.

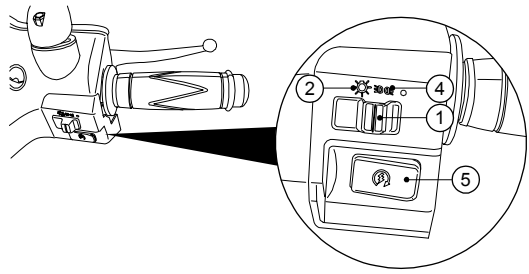
***WARNING! USE EXTREME CAUTION WHEN ENGAGING THE FRONT BRAKE TO AVOID LOCKING THE FRONT WHEEL. LOCKING THE FRONT WHEEL CAN CAUSE A SERIOUS ACCIDENT.***

- **Throttle grip (7):** The rotary throttle grip is on the right handlebar. Accelerate by rotating the throttle towards you. Decelerate by rotating the throttle away from you. The throttle includes a safety spring that snaps the throttle back to idle when released.

# 49cc Scooter

## Operation (cont'd)

### Right brake/ switch assembly



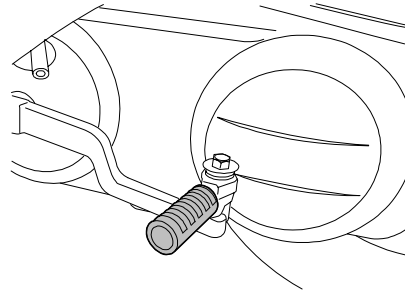

- **Headlight switch (1):** The headlight must always be on while the vehicle is in operation. Slide the middle switch to the left position (2) to turn on the headlight taillight, speedometer lamp, and special parking lamps. The right position (3) lights the taillight and parking lamp. The middle position (4) also lights the panel lamp.

***WARNING! NEVER DRIVE THE VEHICLE WITH THE HEADLIGHT SWITCH IN POSITION 3 OR 4. OTHER DRIVERS MAY NOT BE ABLE TO SEE YOU AND/OR YOU MAY NOT BE ABLE TO SEE AND AVOID HAZARDS, WHICH COULD CAUSE A SERIOUS ACCIDENT.***

- **Electric starter switch (5):** The electric starter switch is located beneath the headlight switch. Press this button while squeezing the rear brake handle. Never run the starter for more than 5 seconds at a time. Allow at least 10 seconds between each starting attempt.
- **Emergency stop switch (6):** Your scooter is equipped with a safety stop switch located above the headlight switch. In the event of an emergency, you can stop the engine by pressing the top portion of the switch. Be sure to return the switch to the RUN position before attempting to start the scooter. We recommend leaving this switch in the RUN position at all times under normal circumstances. Always return the key switch to the OFF position after stopping the scooter. Leaving the key in the ON position may drain the battery.

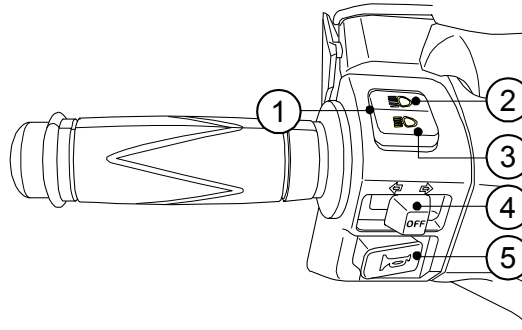
# Operation (cont'd)

## Kickstarter



Use the kickstarter to start the engine if the battery is drained. Once started, leave the engine running until the battery recharges sufficiently to restart the scooter. This option is not available on electric-powered scooters.

## Left brake/switch assembly

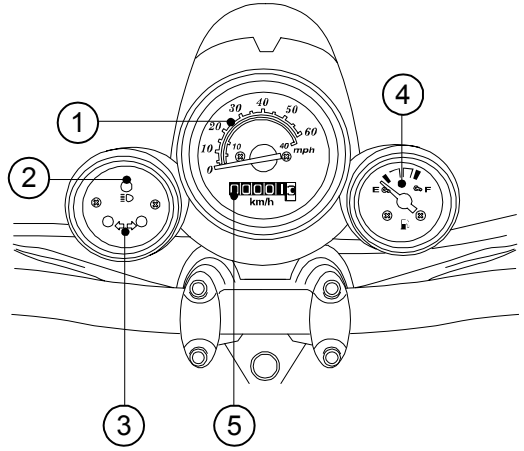



- **High/low beam light switch (1):** To activate the high beam, move the switch to position (2). For low beam, use position (3). You can flash the high beam (such as during passing) by pushing the light switch down and releasing it.
- **Turn signal switch (4):** Slide the switch plate left for a left signal and right for a right signal. Press the center of the switch to cancel the turn signal.
- **Horn (5):** Press the bottom button to sound the horn.

# 49cc Scooter

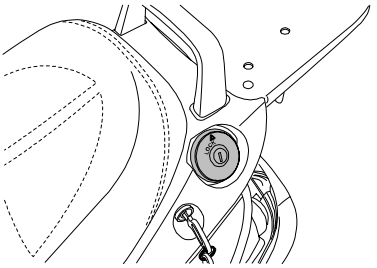
# Operation (cont'd)

## Instrument panel




- **Speedometer (1):** Indicates the current driving speed in both km/h and mph.
- **High beam indication lamp (2)**: Illuminates when the high beam is selected.
- **Turn signal lamp (3):** Indicates that the turn signal is activated.
- **Fuel indicator (4):** Indicates the fuel level. When the gauge reads "F" (Full) the total fuel including reserve is 1.6 gallons (6.06L). The pointer first enters the red zone when there is about 1 quart of fuel remaining in the tank.
- **Odometer (5):** Indicates the total distance the vehicle has traveled, in km.

## Seat Lock

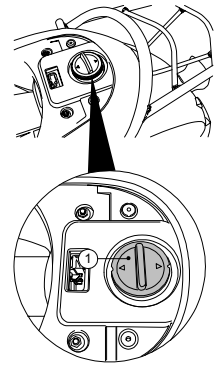


- **To open:** Insert the key just below the seat on the left side of the vehicle. Press the seat down slightly while turning the key clockwise to release the latch. Lift the seat.
- **To close:** Press down the seat until locked, then remove the key. Never leave the key in the lock.

# Owner's Manual

## Operation (cont'd)

### Fuel tank




Lift the gas cap's protective cover (1) and insert the ignition key into the lock. Turn the key and the gas cap (2) clockwise to remove the fuel cap.

To reinstall the fuel cap, line the bulge of the cap with the groove in the fuel tank. Press the key down with the fuel cap and turn both key and cap counterclockwise to align with the mark on the tank. Remove the key once the cap is locked in place.

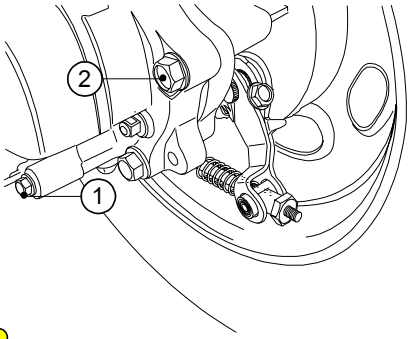
***WARNING! GASOLINE IS FLAMMABLE AND EXPLOSIVE. USE EXTREME CAUTION WHEN FUELING YOUR SCOOTER. ONLY FILL THE TANK IN WELL-VENTILATED AREAS. SHUT OFF THE ENGINE AND PLACE THE SCOOTER ON ITS CENTER STAND TO ENSURE PROPER FILLING WHILE ELIMINATING THE RISK OF STATIC IGNITION CAUSED BY IMPROPER GROUNDING. NEVER SMOKE NEAR GASOLINE. NEVER OVERFILL THE GAS TANK. ALWAYS MAKE SURE THE FUEL CAP IS SECURELY FASTENED AFTER EACH FUELING.***

***WARNING! DO NOT SPLASH OR SPILL GASOLINE WHILE FUELING. IF A SPILL OCCURS, IMMEDIATELY WIPE OFF ALL SURFACES PRIOR TO STARTING THE ENGINE. AVOID SKIN CONTACT WITH GASOLINE AND DO NOT BREATHE GASOLINE FUMES. KEEP GASOLINE AWAY FROM FLAMES OR ELECTRIC SPARKS.***

# 49cc Scooter

## Maintenance

### Transmission oil

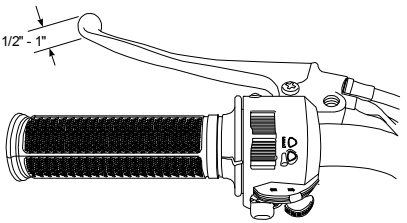



To change the transmission fluid (gas scooters only), place a catch basin under the rear of the transmission case, unscrew the drain plug (1) from the transmission, and allow the old oil to drain completely. Replace the drain and tighten until snug. Remove the oil filler plug (2) from the center of the transmission case, add 3.38 oz. of 90-weight gear oil to the transmission, and return the filler plug.

### Air filter

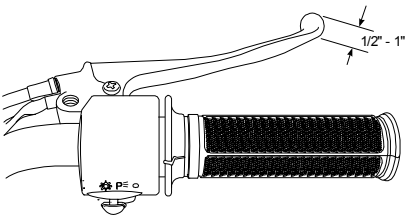
The air filter (gas scooters only) must be cleaned periodically. Look for a black hose extending from the carburetor and into a black box (on the left side of the scooter near the rear wheel). Release the plastic snap on the box and unhinge the lid. Remove the foam air filter inside and soak it in kerosene to remove impurities. Gently squeeze the filter dry without wringing or twisting. Add 1-2 drops of 90w oil, squeeze, and reinstall.

### Brake Adjustment




The front brake lever assembly is on the right handlebar, the rear on the left. Adjust the rear brake lever free play so that it is between 1/2” and 1”. You cannot adjust the front brake; make sure the reservoir is filled with clean DOT-3 brake fluid.

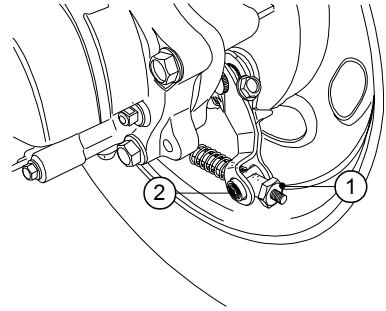
To adjust the rear brake, turn the adjusting nut (1) clockwise to increase free play and vice-versa.



# Owner's Manual

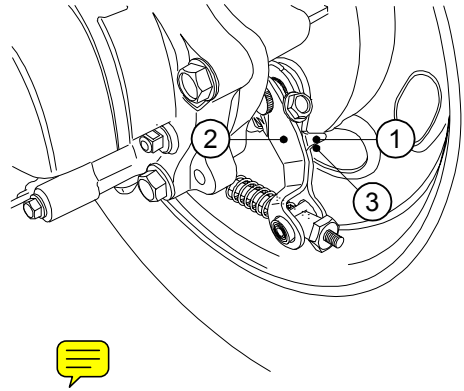
# Maintenance (cont'd)

## Brake Adjustment (cont'd)




Make sure that the groove on the adjusting nut (1) is aimed at the rod pin (2). This secures the adjusting nut. Always test the brakes after any adjustment.

Check brake pad wear after the first 1,000 miles and every 500 miles thereafter. There are two way to do this:




- Remove the plug covering the brake pad wear indicator (1) located on the brake arm (2). If the indicator points to the reference mark (3), have the brake pads replaced by a qualified technician.
- Visually check pads for wear.

## Carburetor

Adjust the air/fuel mixture as follows: With the engine running at fast idle, turn the air-mixture screw counterclockwise until the engine slows and starts running rough. Turn the air screw clockwise and count the number of turns until the engine again slows and runs rough. Turn the screw counterclockwise 1/2 the number of turns you just counted out. Reset the idle speed.

## Fasteners and Fittings

Check for looseness before each trip and tighten as necessary.

## Fuel Petcock

Check vacuum and fuel lines for drying/cracking/looseness.

# 49cc Scooter

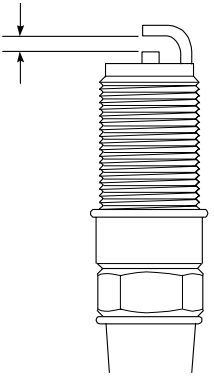
## Maintenance (cont'd)

### Lights

Check for proper operation. Replace as needed with bulbs of correct wattage.

### Spark Plug

Replace every 2,500 miles. Clean and re-gap to 0.24"-0.28" (.6-.7mm) as needed.



### Steering

Move the handlebar forward and backward. If loose, have a qualified technician repair it immediately.

### Suspension

Check for looseness. have a qualified technician fix any problems found.

### Valves

A qualified technician should adjust the valves every 400 miles.

### Wheels and Tires

Check for rim trueness. Check tire wear and air pressure (Front = 30PIS, Rear = 35PSI). Tire size: 10x3.

### Storing your Scooter

Before storing your scooter, drain the carburetor and fuel tank. Disconnect the battery. Cover the scooter with a tarp or other protective sheet.

*Note: Do not save or store gasoline over the winter. Using old gasoline that has deteriorated from storage will cause hard starting and affect engine performance.*

When removing the scooter from storage, re-read this Operator Manual, Engine Operator's Manual, and perform assembly/maintenance as necessary. Perform the pre-ride checklist before all rides.

# Maintenance (cont'd)

## Maintenance Schedule

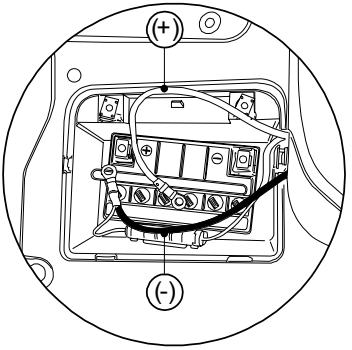
Following the maintenance schedule will prolong your scooter's life and help ensure trouble-free operation.

| System | Comments | Interval (miles) | | | | |
|---|---|---|---|---|---|---|
| | | Initial | | | Ongoing | |
| | | 150 | 500 | 1K | 1K | 2.5 K |
| Transmission oil | 80W90 gear oil | X | | | | X |
| Crankcase oil | Change oil/clean filter | | | X | X | X |
| Spark plug (CH7SA) | Inspect & clean or replace | X | X | X | X | X |
| Carburetor/ fittings | Check, clean, refit, adjust | | X | X | X | X |
| Brake system | Check & adjust | X | X | X | X | X |
| Suspension | Check & repair | X | X | X | X | X |
| Fuel petcock | Clean & flush | | X | X | X | X |
| Lights | Check & replace | X | X | X | X | X |
| Lubricate chassis | | X | X | X | X | X |
| Inspect muffler | Tighten | X | X | X | X | X |
| Inspect chain | Tension, lube | X | X | X | X | X |
| Clean air filter | Perform these items more often if wet or dusty. | | X | X | X | X |
| Clean torque converter | | | X | X | X | X |
| Spark plug | Clean & gap | | | X | X | X |

# 49cc Scooter

## Maintenance (cont'd)

### Battery (gas scooter)



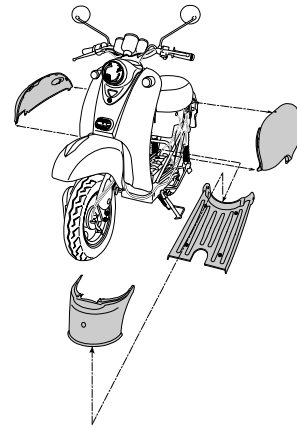

Your scooter uses a sealed, maintenance-free lead acid battery rated GT5l-VS 4AH.

- **Charging new batteries:** Fill the battery with the acid in the pre-packed bottles and allow to rest for 30 minutes prior to sealing the battery. After sealing, charge the battery using a low-current charge (.5A - 1A for <6 hours).
- **Recharging batteries:** For best results, charge the battery at a low current (see above). You can fast-charge the battery at 2A for up to 1 hour. You may wish to use a trickle charger (<.5A) to keep the battery charged if you use your scooter infrequently or for short trips. You can attach a trickle charger for up to a week.

***WARNING! BATTERY ACID IS EXTREMELY CORROSIVE. ALWAYS WEAR GLOVES AND EYE PROTECTION WHEN HANDLING ACID. IF YOUR SKIN OR EYE CONTACTS THE ACID, IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES. IF SWALLOWED, DO NOT INDUCE VOMITING; CALL YOUR LOCAL POISON CONTROL CENTER.***

# Owner's Manual

## Maintenance (cont'd)

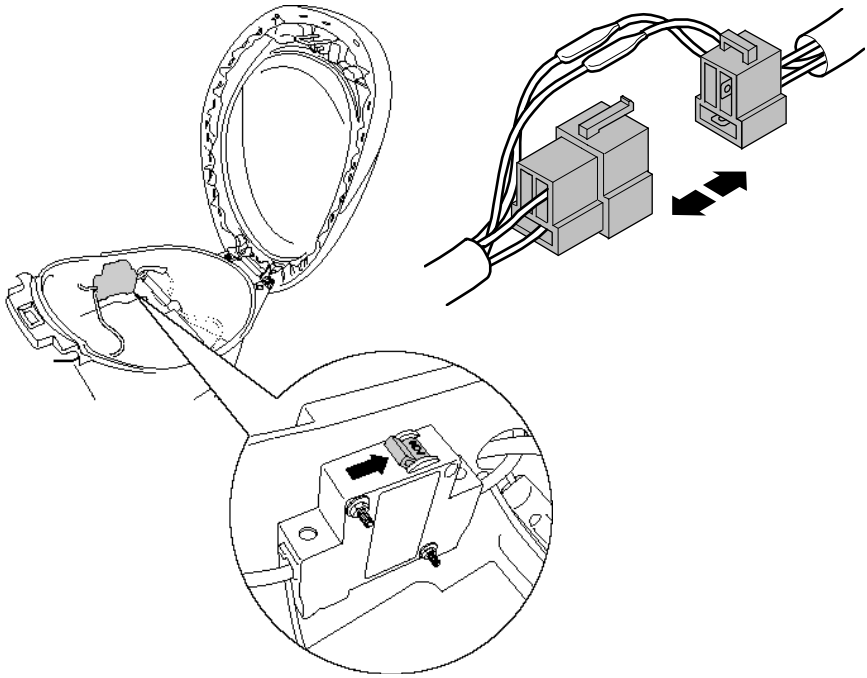


### Battery (electric scooter)

To access the batteries, remove the fasteners securing the scooter's left and right side panels, floor panel, and the panel beneath the seat. Remove the body panels being careful not to damage them.

The battery power switch is located in the storage compartment under the seat. Always turn this switch OFF prior to performing any work on the motor, rear wheel, rear brake, etc.

After shutting off the power, disconnect the motor power supply by carefully unclipping and separating the two connectors. Do not disconnect the separate grounding.

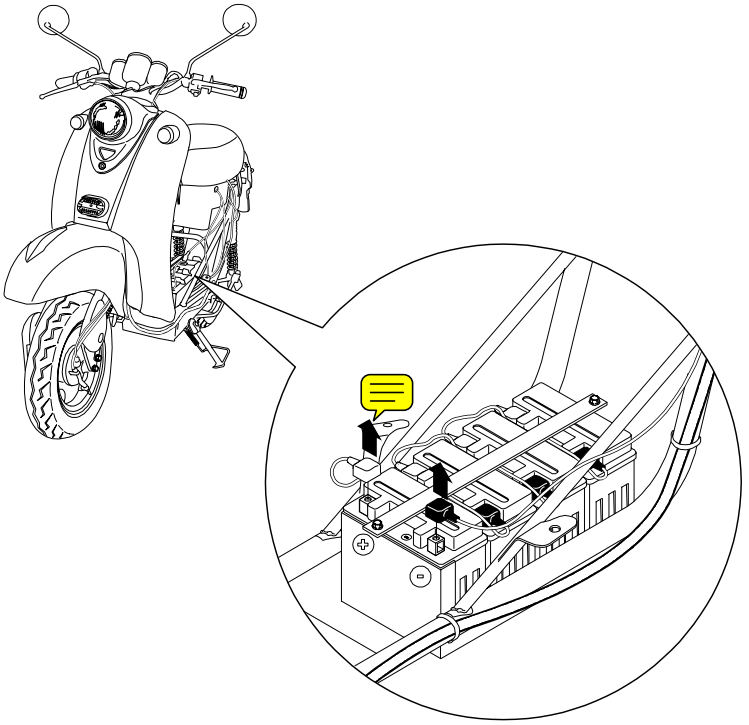


# 49cc Scooter

## Maintenance (cont'd)

### Battery (electric scooter - cont'd)

Remove the fasteners securing the battery restraining bracket. Remove the bracket. Disconnect the battery terminals (positive first, then negative).



Check the battery voltage with a voltmeter.

To charge the batteries, locate the charging receptacle inside the rear storage compartment. Plug the charger (included) into this receptacle and into a normal AC wall outlet. Charge until the charger indicates a full charge.

# Owner's Manual

# Troubleshooting (gas scooter)

## Hard/No Starting

- **Fuel supply system**:
  - Check fuel supply for water.
  - Check petcock for blockage.*
  - Check for air-intake leakage.
  - Check for excessive fuel in cylinder: remove spark plug to discharge.
  - Check air filter for blockage: clean element.
- **Electrical system:**
  - Check to be sure kill switch is set to "run" position.
  - Check spark plug: clean or replace.
  - Check ignition coil: replace.*
  - Check magneto: repair or replace.*
- **Air passage:**
  - Check spark plug for compression leakage: tighten.
  - Check head and block joint for leakage: tighten.
  - Check for muffler blockage: clean*

## Idle Speed

- Excessive idle speed
  - Check carburetor adjustment.
  - Ensure connection of automatic choke wire.
  - Check slack in throttle cable housing (1/16 inch).
  - Check throttle gap (1/15 inch).
- No idle speed
  - Check carburetor adjustment.
  - Check fuel supply or intake passage for blockage.
  - Check for crankcase leakage (have fixed by specialist).

* These checks should be undertaken by an authorized service agent.

# 49cc Scooter

## Parts

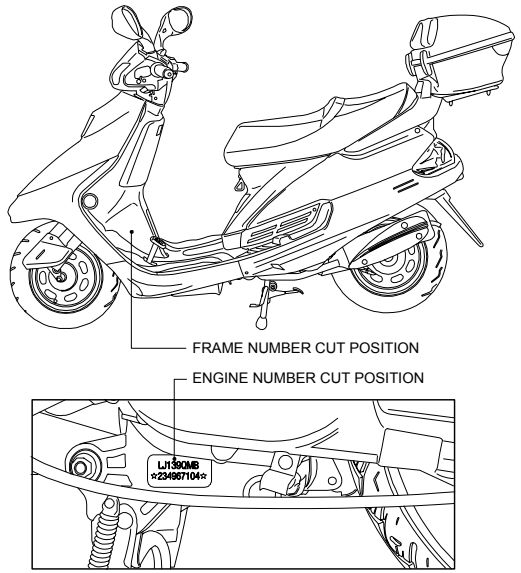
Order all replacement parts from your dealer. Take this manual and all supplements to the dealer when ordering or picking up parts in person. You may also order spare parts directly from the factory by calling ~~(909) 591-2292~~. Orders may be subject to a minimum order fee. Record the model number and serial number of the vehicle in the spaces below for reference when ordering replacement parts.

*Note: Filling out and returning your warranty card ensures that your warranty and service needs will be met.*

**Model No.:**_____

**Serial No. (from black and silver tag):**_____

The Vehicle Identification Number (VIN) is required for all warranty work, theft recovery, and consumer safety. The VIN is located under the clip-on above the floorboard. The complete VIN also appears on a plate affixed to the main engine tube under the front floorboard.



# Owner's Manual

## Specifications

### Dimensions/Weights

| | |
|---|---|
| Dimensions (LxWxH) | 66"x26"x42" |
| Wheelbase | 47" |
| Min. ground clearance | 3.25" |
| Tire size | 10x3 |
| Net weight | 192 lbs |
| Carrying capacity | 200 lbs |
| Maximum speed | 29mph/35mph |

### Engine (4-stroke gas)

| | |
|---|---|
| Type | air-cooled 4-stroke horizontal |
| Bore x stroke | 39x41.4mm |
| Displacement | 49.5cc |
| Rated power | 1.5bph/3bph |
| Transmission | belt drive variator (CVT) |
| Starter | electric w/supplemental kickstarter |
| Spark plug | NGK C7HSA |

### Fuel

| | |
|---|---|
| Capacity | 1.6 gallons |
| Gas grade | 87 octane |

### Bulbs

| | |
|---|---|
| Headlight | 12v 35w/35w |
| Brake/tail light | 12v 10w/3w |
| Speedometer | 12v 1.7w |
| Turn signal | 12v 8w |
| Front lamp | 12v 3w |

# 49cc Scooter

## Specifications (cont'd)

### Motor (electric)

| | |
|---|---|
| Rated power | 750W |
| Rated current | 22A |
| Rated voltage | 48V |
| Working efficiency | >72% |
| Battery | Sealed lead-acid |
| Battery capacity | 12V 17AH (x4) |

## Troubleshooting (electric scooter)

- **Scooter does not start:**
  - Charge or replace batteries.
  - Reconnect battery terminals.
- **Scooter runs weak:**
  - Charge or replace batteries.
- **Scooter starts but does not move:**
  - Replace 750W motor.